

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

RYAN, et al.

Serial No.: 09/725,182

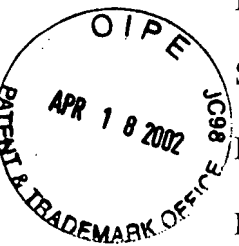
Filed: 29 November 2000

For: Novel and Practical Serological assay for the
Clinical Diagnosis of Leishmaniasis

Art Unit: 1645

Examiner: Baskar, Padma

Atty. Docket: P66748US1 (98-41X)



#14
Linda
4/24/02
RECEIVED
APR 23 2002
TECH CENTER 1600/2908

DECLARATION OF SUZANNAH K. SUNDBY
UNDER 37 C.F.R. § 1.132

1. I, Suzannah K. Sundby, am a citizen of the United States of America and I reside at 7708 Holmes Run Drive, Falls Church, VA 22042.
2. I am the patent attorney representing the United States Army Medical Research and Materiel Command, the Walter Reed Army Institute of Research, and the Inventors in the above-referenced patent application, U.S. patent application Serial No. 09/725,182.
3. I am a Member of the State Bar of California, and I am registered to practice before the United States Patent and Trademark Office.
4. On 21 February 2002, I telephoned GIBCO/Invitrogen at 800-828-6686 and attempted to order XOM without the product identification number and without approval by one who has previously-obtained XOM. I talked with a person named Phyllis of the Custom Orders Department and she said that I could not obtain XOM without the product identification number. Phyllis then conferenced in a product specialist named David who confirmed that I have to have the product identification number. Both Phyllis and David told me that the way their custom database is set up, they cannot provide a custom order product, such as XOM, without the product identification number. Phyllis and David also said that it is not GIBCO/Invitrogen's policy to disclose the ingredients of a custom order to anyone who did not initially specify the custom order.
5. A representative from Invitrogen later informed that there was one attempted order for XOM on 21 February 2002, by an unidentified person. I believe I am that unidentified person.
6. Therefore, as a member of the general public, I was unable to obtain XOM or its ingredients from GIBCO/Invitrogen without the product identification number and approval from one who previously obtained XOM.

7. I hereby state that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patents issuing thereon.

EXECUTED at Washington DC, this 17 day of April 2002,

by


Suzannah K. Sundby

April 15, 2002

Ms. Suzannah Sundby
Jacobson Holman
400 Seventh Street
Washington, DC 20004

Re: XOM medium (GIBCO)

Dear Ms. Sundby:

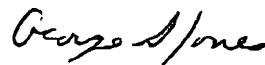
I was asked to follow up a request that you made to a co-worker relating to how Invitrogen Corporation and specifically GIBCO (a part of Invitrogen) handles special orders and requests from customers and potential customers.

GIBCO treats all special orders in confidence. When a customer requests a custom product with specific recipe including manufacturing conditions, methods, or packaging, etc., if GIBCO produces the product, only the original requester (or other members from the same entity can freely order the custom product. If someone outside the original entity would request the product, they would need permission from a person from the original entity who had already ordered the product.

The original requester (CD&I/WRAIR) is the only entity to have submitted a written order for XOM. There was mention by a GIBCO employee of a telephone request, but it was not followed with a written order. Indeed XOM would not have been shipped to anyone else without authorization through Samuel K. Martin of CD&I/WRAIR. The contents and other requirements of the custom product would not have been divulged to anyone outside of GIBCO and the original requester. These policies were developed to best serve our customers who often desire confidentiality of their custom orders.

After receiving your letter, I spoke on the telephone and in person with GIBCO employees. They relied both on written records that GIBCO does not wish to make public and on standard practice followed at the GIBCO site. I have provided a summary above that Invitrogen does not believe compromises corporate information. This letter can thus be made public.

Best regards,



George S. Jones
Patent Attorney
Invitrogen Corporation

CURRICULUM VITAE

Alan J. Magill M.D., FACP
LTC(P), MC, U.S. Army

PERSONAL INFORMATION

Date of birth: 26 November 1953
Place of birth: Craig, Colorado, USA
Citizenship: USA
Professional address: Department of Clinical Trials
Walter Reed Army Institute of Research
Washington DC, 20307-5100
POCs: (301) 319-9959 phone
(301) 536-7356 cell
(301) 319-9585 fax
alan.magill@na.amedd.army.mil

PRESENT POSITIONS

Deputy Director, Division of Communicable Diseases and Immunology (DCD&I)
Walter Reed Army Institute of Research
Silver Spring, MD

Senior Staff Attending Physician
Warren G. Magnuson Clinical Center
National Institutes of Health
Bethesda, MD

Attending Physician
Infectious Disease Service
Walter Reed Army Medical Center
Washington DC

Unaffiliated Voting Member
NMRC Institutional Review Board (IRB)
NMRC, Silver Spring, MD

Adjunct Associate Professor
Department of Preventive Medicine and Biometrics
Uniformed Services University of the Health Sciences
F. Edward Hébert School of Medicine
Bethesda, MD

Assistant Professor of Medicine
Department of Medicine
Uniformed Services University of the Health Sciences
F. Edward Hébert School of Medicine
Bethesda, MD

Research Coordinator (RC) for Common Diagnostics
Science and Technology Evaluation Program (STEP) L
Military Research and Material Command (MRMC)
Ft. Detrick, MD

Principal Investigator
Department of Clinical Trials
Walter Reed Army Institute of Research
Silver Spring, MD

EDUCATION

Lamar University	Beaumont, Texas	B.S.	1972-1976
University of Rhode Island	Kingston, Rhode Island	M.S.	1976-1978
Baylor College of Medicine	Houston, Texas	M.D.	1980-1984

Internship:	Medicine	Tripler Army Medical Center, Honolulu, HI	7/84-6/85
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Residency:	Medicine	Tripler Army Medical Center, Honolulu, HI	7/85-6/87
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Fellowship:	Infectious Disease	Walter Reed Army Medical Center, Washington D.C.	7/89-6/92
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Advanced / Additional Training:

Clinical Management and Control of Tuberculosis	National Jewish Center for Immunology and Respiratory Medicine. Denver, Colorado	1991
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Recombinant DNA Methodology	Center for Advanced Training in Cell and Molecular Biology. Catholic University, Washington D.C.	1994
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DOD Sponsored Laboratory Animal Workshops: Rodent and Lagomorph	Walter Reed Army Institute of Research. Washington D.C.	1994
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Good Clinical Practices	Center for Professional Advancement. East Brunswick, New Jersey	1994
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Practical Considerations in Preparing Investigational New Drug and New Drug Applications (IND/NDAs)	Center for Professional Advancement. East Brunswick, New Jersey	1995
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Molecular and Cellular Mechanisms of Immunity	Foundation for Advanced Education in the Sciences, Inc., Graduate School at the NIH. Bethesda, Maryland	1995
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How to Get to Market with Medical Devices and Diagnostics	Center for Professional Advancement. East Brunswick, New Jersey	1996
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Clinical Trials: The Role of the Clinical Investigator in Medical Product Development	FDA & NIAID sponsored symposium. NIH campus, Bethesda, MD	1996
DOD Sponsored Laboratory Animal Workshops: Non-human Primates	Walter Reed Army Institute of Research. Washington D.C.	1996
Sound Clinical Trial Practices in the Era of Gene Therapy	Center for Biologics and Research of the Food and Drug Administration. Bethesda, MD	2000
IRB 101	Uniformed Services of the Health Sciences, Bethesda, MD	2001
Clinical Vaccine Trials: Planning & Implementation Course JHU DED Course No. 223.705.81	Center for Immunization Research Johns Hopkins Bloomberg School of Public health Baltimore, MD, USA	2001
Conducting Research Responsibly	Society of Research Administrators International (SRA) Sponsored by the Henry M. Jackson Foundation Silver Spring, MD, USA	2001
Computer based (CBT) Clinical Research Training for Principal Investigators	NIAID intramural research program Fulfilled the Training and Education Standard issued by the NIH for Principal Investigators conducting clinical research . Bethesda, MD, USA	2001
Getting into Humans with Your Molecule: Pre-Clinical Approaches And Strategies for Biologics	Pharmaceutical Education & Research Institute (PERI) Bethesda, MD, USA	2001
HSRRB Off-Site Meeting Ethics of DoD International Research	MRMC HSRRB Detrick, MD, USA	2001
Guidance for Clinical Trial Sponsors: On the Establishment and Operation of Clinical Trial Data Monitoring Committees	FDA sponsored open meeting Bethesda, MD	2001
DoD Anthrax Vaccine Immunization AVIP Program (AVIP) Spokesperson Training	WRAIR, Silver Spring, MD	Jan 2002

BOARD CERTIFICATION, LICENSURE AND CERTIFICATIONS

Federal Licensing Examination (FLEX)		1985
American Board of Internal Medicine - Internal Medicine,	No. 114140	1987
American Board of Internal Medicine - Infectious Disease,	No. 114140	1992
Enrollment in the Continuous Professional Development (CPD) program for re-certification in Infectious Disease		2001

Certificate of Knowledge in Tropical Medicine and Travelers' Health of the American Society of Tropical Medicine and Hygiene	1999
Basic Life Support (BLS)	12/1999
Advanced Cardiac Life Support (ACLS) provider	12/2000

MEDICAL LICENSURE

Hawaii	Medical License #5502	1984 - current
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HONORS AND AWARDS

Outstanding Teaching Resident, Internal Medicine, Tripler Army Medical Center	1986
Finalist, Bailey K. Ashford Award	1992
Buescher Young Scientist Award	1993

MILITARY SERVICE

Entered U.S. Army on 12 Jun 1984 via a direct commission.
Currently a LTC(P) in the Regular Army

Army Training:

AMEDD Officer Basic Course	San Antonio, Texas	1984
Combat Casualty Care Course	San Antonio, Texas	1987
Army Airborne Course	Ft. Benning, Georgia	1990
AMEDD Officer Advanced Course	Correspondence	1991
Air Assault Course	Ft. Rucker, Alabama	1992
WRAIR Tropical Medicine Course (6H-F23)	Washington D.C.	1992
JMRTC Deployment Medicine Instructor Course	St. Louis, Missouri	1993
Medical Management of Chemical and Biological Casualties Course (6H-F26)	Aberdeen Proving Ground and Ft. Detrick, Maryland	1998
Command and General Staff Course	Correspondence	1999

Army Awards:

Meritorious Service Medal	Jul 1989	Exemplary service as as staff internist, Germany
Meritorious Service Medal	May 1994	Exemplary performance as as an ID officer
Meritorious Service Medal	Oct 1997	Improved care of Gulf War veterans
Meritorious Service Medal	Oct 2000	Exemplary service as Head of Parasitology, Naval Medical Research Center Detachment, Lima, Peru
Army Commendation Award	Feb 1992	Recognition of viscerotropic leishmaniasis
Army Commendation Award	May 1992	Finalist, Bailey K. Ashford Clinical Research
Army Commendation Award	Nov 1993	Support of Operation Restore Hope
Certificate of Recognition	Sep 2000	Service During the Cold War

PREVIOUS PROFESSIONAL POSITIONS AND APPOINTMENTS

Academic:

Teaching Fellow, Uniformed Services University of the Health Sciences, Bethesda, MD	1989-1990
Instructor in Medicine, Uniformed Services University of the Health Sciences Bethesda, MD	1990-1992

Assistant Professor of Medicine, Uniformed Services University of the Health Sciences, Bethesda, MD	1992-1996 2001-
Adjunct Associate Professor Department of Preventive Medicine and Biometrics Uniformed Services University F. Edward Hébert School of Medicine	2000-

Assignments:

Staff Internist	5 th General Hospital, Bad Canstatt, FRG	1987-1989
Infectious Disease Officer, Dept. of Immunology	Walter Reed Army Institute of Research, Washington D.C	1992-1994
Assistant Chief, Dept. of Immunology	Walter Reed Army Institute of Research, Washington D.C.	1994-1996
Head, Parasitology	Naval Medical Research Center Detachment Lima, Peru	1996-1999
Director, Clinical Research	Malaria Vaccine Development Unit (MVDU) LPD / NIAID / NIH Bethesda, MD	Jan, 2000- Oct - 2001
Deputy Director, Division of Communicable Diseases and Immunology	Walter Reed Army Institute of Research Silver Spring, MD	Oct 2001- present

EDUCATION - TEACHING

Continuing Education: Faculty member and invited guest lecturer for travel medicine, tropical medicine, and parasitology courses:

1. WRAIR Tropical Medicine Course, Washington D.C. Leishmaniasis lectures for 1991-95, Medical Threat Assessment 1993-94, The Febrile Patient Returning from Africa 1994.
2. Military Tropical Medicine Course; USUHS campus, Bethesda, MD; 1996-2001. "The Leishmaniasis"
3. USAF Global Medicine Course, Brooke AFB, San Antonio, Texas. Leishmaniasis lectures for 1994-98.
4. Clinical Aspects of Tropical Medicine. The Johns Hopkins School of Hygiene and Public Health. Core Leishmaniasis lectures for 1993-1995.
5. Medicine for Adventure Travel, July 1994, 1995, 1997, 1999, 2001. Jackson Hole, WY. Topics: "Malaria Prophylaxis and Treatment", "Preparing for an African Safari", "Standby Therapy as an Option for the Traveler", "Use of the New Rapid Diagnostic Tests for Self-Diagnosis by Travelers", and "Management of the Febrile Traveler from Africa"
6. Invited lecture to students taking a course entitled "Current Issues in Medical Intelligence: and Human War, Somalia, and Haiti".
7. Annual Amazon Travel Medicine Course, January 1997, 1998. Lima, Iquitos, and Amazon

Lodges, Peru. "Leishmaniasis", "Disease During Peacekeeping Missions", "Fever in the Returned Traveler", "Chemoprophylaxis of Malaria"

8. The Gorgas Course in Clinical Tropical Medicine sponsored by the Gorgas Memorial Institute, University of Alabama. Feb-April, 1997,1998, 1999, 2000, 2001. Lima and Iquitos, Peru. "Fever in Returned Travelers", "Leishmaniasis: Visceral and Old World ", "Infectious Diseases During Military Operations and Peacekeeping Missions", "Severe and Complicated Malaria", "Drug Resistance in *P. falciparum* malaria", " Chloroquine/Primaquine Resistant Vivax Malaria" and "*Plasmodium vivax* malaria".

9. The Expert Gorgas Course in Clinical Tropical Medicine sponsored by the Gorgas Memorial Institute, Jan,1999. Lima, Peru. "Update in Malaria", and "Travel Medicine Related Problems

10. Curso Internacional "Parasitologia Clinica
Sponsored by the Instituto de Medicina Tropical "Alexander Von Humboldt", Universidad Peruana Cayetano Heredia, Lima, Peru.
April 1997, April 1998.
Topics: "Leishmaniasis: Visceral and Old World ", "Severe and Complicated Malaria", and "Chloroquine/Primaquine Resistant Vivax Malaria"

11. Summer Institute of Tropical Medicine and Public Health
Sponsored by the Johns Hopkins University School of Public Health; Baltimore, MD, USA
Lectures in July 2000, August 2001 .
Topics: "Clinical Malaria", "Management of Acute Malaria in the Non-immune", "Why does anti-malarial drug therapy sometimes fail?", and "*Plasmodium vivax*".

12. Malaria Epidemiology and Control (PM0569) Course
Sponsored by the Uniformed Services University of the Health Sciences (USUHS), Bethesda, MD, USA.
Lectures in March 2001.
Topics: "Clinical Course and Pathology" and "Malaria Drug Resistance"

13. Medicine in the Mountains CME based course on issues for the international traveler
Sponsored by the University of Toronto, Ontario, Canada. Invited guest faculty member.
26-30 March, 2001. Lhasa, Tibet.
Topics: "Rabies Vaccines", "Typhoid Vaccines", and "Hepatitis E".

14. Winter Institute of Tropical Medicine and Public Health
Sponsored by the Johns Hopkins University School of Public Health; Baltimore, MD, USA
Lectures in Jan 2002
Topics: "Malaria"

EDUCATION – JOURNALS AND BOOKS

Scientific manuscript reviewer for:

American Journal of Tropical Medicine and Hygiene	January	1994 -
Annals of Internal Medicine	May	1996-
Emerging Infectious Diseases	June	1999-
Journal of Travel Medicine	June	1999-
Infection and Immunity	Jan	2001-
Clinical Infectious Diseases	April	2001-
JAMA	June	2001-
Journal of Infectious Diseases	June	2001-
Vaccine	June	2001-

Associate editor for the 8th edition of Hunter's Tropical Medicine 1996-1999

Co-editor for the 9th edition of Hunter's Tropical Medicine

1999-

PROFESSIONAL AND SOCIETY MEMBERSHIPS

American College of Physicians - ASIM	Member Fellow	1989 -1999 1999 -
American Military Society of Uniformed Surgeons	Member	1993 -
American Society of Tropical Medicine and Hygiene	Member	1991 -
Clinical Tropical Medicine scientific program committee	Member	1998 - 1999
Clinical Tropical Medicine scientific program committee	Head	2000 -
Co-chair, 2001 ASTM&H pre-course meeting		2001
Greater Washington Infectious Disease Society	Member	1989 -1996
Infectious Disease Society of America	Member-in-Training Member	1990 -1997 1997 -
International Society of Travel Medicine	Member	1992 -
Royal Society of Tropical Medicine and Hygiene	Member	1994 -
Wilderness Medical Society	Member	1992 - 1997

PRESENTATIONS AT NATIONAL MEETINGS

1. Fall 1994 meeting of the Texas Branch of the American Society of Microbiology, 01-03 December 1994. College Station, TX. "Viscerotropic Leishmaniasis and the Gulf War Syndrome"
2. Topics in International Travel and Tropical Medicine, Johns Hopkins University School of Hygiene and Public Health, Baltimore, MD. October, 1993, 1995. "Leishmaniasis"
3. X Congreso Científico Nacional de Estudiantes de Medicina. Universidad de San Martín de Porres, Lima, Peru. 07 November 1996. "Development of New Drugs and Vaccines for Malaria"
4. V Congreso Peruano de Enfermedades Infecciosas y Tropicales, September 4-7, 1997. "Malaria Maligna" and "*P. falciparum* resistente a drogas antimalaricas"
5. Curso Internacional "Actualización en Medicina Tropical: Enfermedades Transmitadas por vectores", 5-6 Dec 1998. "Malaria: el Agente y su Patogenia"
6. Curso Mycobacterias y Parásitos: Entre la endemia, la emergencia y la reemergencia, 6-8 Aug 1999. "Malaria resistente a fármacos"
7. VI Congreso Peruano de Enfermedades Infecciosas y Tropicales. Lima, Peru. August 1999. "Malaria" in "Curso Pre-Congreso" and "Malaria Resistente a Drogas" in Conferencias Magistrales.
8. Reunion Technica: "Politica Nacional de Medicamentos Antimalaricos". Lima, Peru. August 1999. "Results of Therapeutic Efficacy Trials with Fansidar® in the Loreto Region of Peru."

9. Army Region ACP Meeting 2000. Reston, VA. November 2000. " The Military Infectious Disease Research Program in Malaria Rapid Diagnostic Devices (MRDDs): Current Status and Plans for the Future - An exercise in Tropical Medicine Product Development.

PRESENTATIONS AT INTERNATIONAL MEETINGS

1. VIII Brazilian Congress of Infectious Diseases, September 17-21, 1994. Porto Alegre, Brazil. Plenary lecture: "Viscerotropic leishmaniasis in U.S. military following Operation Desert Storm"
2. 45th International Military Medical Surgical Clinical Congress, April 18-21, 1994. Willengen, Germany. Gave 4 lectures to the Internal Medicine section: 1) Somalia-Acute Febrile Illness, 2) Somalia-The Post Deployment Experience, 3) 1994 Update for the Clinician on Tuberculosis, Hepatitis C, and HIV, and 4) The Medical Threat Assessment.
3. Global Meeting on Parasitic Diseases. 18-22 March, 1996. New Delhi, India. "Pre- erythrocytic Malaria Vaccines: Historical Development and Current Status"
4. VIII Pan American Congress of Infectious Diseases and the X Brazilian Congress of Infectious Diseases, May 18-23, 1997. Salvador, Brazil. Round Table: "Development and Evaluation of a Human Malaria Vaccine"
5. Second Annual Western Hemisphere Senior Medical Officer Conference. Norfolk, VA. June 1997. "Emerging Infectious Diseases of Strategic Importance in Peru"
6. Curso Internacional: "Avances en vacunas" Aspecto clinico-epidemiologicos e inmunologicos. Lima, Peru. October, 1997. "Vacunas de Cuarto Generación: Malaria"
7. 24th International Congress of Internal Medicine. Lima, Peru. November 3-7, 1998. "Current Prophylaxis of Malaria" and "Drug Resistant Malaria"
8. 1st Curso Binacional de Enfermedades Transmisibles. Sullana, Peru. 16-17 August 1999. "Avances en Nuevas Técnicas de Diagnóstico de Malaria" and "Resistencia Farmacológica en Malaria"

INTRAMURAL PRESENTATIONS

1. Sixth Annual Army Regional ACP meeting, San Fransico, CA. November 1991. "Viscerotropic leishmaniasis in soldiers returning from Operation Desert Storm"
2. Seventh Tri-Service Infectious Disease Conference. Miami, FL. March, 1992. "Viscerotropic leishmaniasis in soldiers returning from Operation Desert Storm"
3. Armed Forces Epidemiological Board (AFEB). Washington DC, February 1992. "Viscerotropic leishmaniasis in returning veterans of Operation Desert Storm"
4. Helminthological Society of Washington. 626th Meeting, Washington DC, March 1992. "Clinical Presentations and Management of Leishmaniasis Patients"
5. USUHS DEA medic training course. USUHS campus, Bethesda, MD. 1992-1993. "Viral Respiratory Diseases - a practical review for field situations in rural Latin America".
6. Fitzsimmons Army Medical Center Internal Medicine Grand Rounds. Denver, Colorado. July, 1993. " Acute Febrile Illness in U.S. forces in Somalia".
7. 11th Annual American College of Physicians (ACP) Army regional meeting, 27 October 1994. Reston, VA. Topic: "Case Studies from Somalian Deployment"

8. Madigan Army Medical Center Grand Rounds. Tacoma, WA. 5 May, 1995. "Infectious Diseases and Military Deployments: Lessons Learned from Somalia".
9. United States Army/Israeli Defense Force Annual Conference. Washington D.C. December 1995. "Somalia: Malaria - Mefloquine prophylaxis failures and primaquine resistance"
10. Host Parasite Relationship Workshop. Indo-US Vaccine Action Program. 9 July, 1996. Bethesda, MD. " Leishmaniasis: Immunosuppression and its Implications for Vaccination"
11. Malaria Interest Group. LPD conference. 22 April, 2000. Bethesda, MD. "The DoD Malaria Rapid Diagnostics Program – Successes and Challenges to Date"
12. NIAID Grand Rounds. Clinical Center, bldg. 10, NIH. 30 Jun, 2000. "Management of Acute Malaria in the Returning Non-immune Traveler".

INVITED PARTICIPATION IN NATIONAL AND INTERNATIONAL MEETINGS OR WORKSHOPS

1. Malaria Transmission Blocking Vaccines: an ideal public good. Sponsored by the World Health Organization, the Bill and Melinda Gates Foundation, and the National Institutes of Health. Bethesda, MD. 3-5 Dec 1999. Citation TDR/RBM/MAL/VAC/2000.
2. Pediatric Malaria Vaccine Clinical Trials Workshop. Sponsored by the Malaria Vaccine Initiative. Fondation Merieux, Annecy, France. 3-4 June, 2000.
3. 2nd Meeting on Novel Adjuvants Currently in/close to Human Clinical Testing. Sponsored by World Health Organization. Fondation Merieux, Annecy, France. 5-7 June, 2000
4. Falciparum Malaria MSP1 Workshop: Progress Toward MSP1 Vaccine Development and Testing. Sponsored by the Malaria Vaccine Initiative. Bethesda, MD, USA, 4 December, 2000.
5. Variant Proteins Expressed on the Surface of Infected Erythrocytes and Their Role in Developing Malaria Vaccines, an Expert Meeting to Develop Consensus Recommendations. Sponsored by Burroughs Wellcome Fund, European Malaria Vaccine Initiative, Malaria Vaccine Initiative at PATH, NIAID, US DoD, US AID; WRAIR/NMRC, Silver Spring, MD. 27-28 Feb 2001.
6. Expert Meeting on Decision Chart for Fever in Returned Travelers. Sponsored by the Working Group on fever in returned Travelers. 7th conference of the International Society of Travel Medicine, Innsbruck, Austria. 27 May, 2001.
7. Joint TDR & IDRI Leishmania Vaccine Clinical Trial Meeting. Sponsored by TDR and IDRI. Geneva, Switzerland 6-7 December, 2001.

SELECTED COMMITTEE ASSIGNMENTS

1. NIAID Clinical Research Standards Implementation Committee
2. Unaffiliated Voting Member, NMRC Committee for the Protection of Human Research Subjects (CPHS). April 2001
3. Malaria Program Protocol Review Committee, Division of Microbiology and Infectious Disease (DMID), NIAID

CLINICAL PRACTICE, INTERESTS, AND ACCOMPLISHMENTS

- While a practicing internist in Germany, I noted a marked number of patients with complaints of seasonal and perennial allergic rhinitis and asthma. Care for the community was focused on acute interventions in the emergency room and intermittent outpatient care. I sought additional training in clinical allergy with the Chief of the Allergy Service for Germany. I initiated a dedicated allergy and asthma service in the Department of Internal Medicine which offered a full service allergen testing laboratory and prescription immunotherapy. Outpatients were referred to the clinic from throughout southern Germany. In addition, an asthma clinic was introduced which focused on long term patient initiated management using medications, education, and objective forced expiratory airflow measures to direct interventions. A significant reduction in emergency case visits was noted over a one year follow-up period.
- Initiated an executive physical evaluation program for the general officer community in the Stuttgart community. This program focused on healthy living and identification of cardiovascular risk factors.
- During my infectious disease fellowship and for two years following its completion, I maintained an outpatient infectious disease clinic seeing patients with HIV infection and a variety of other infectious disease problems.
- While in Peru I served as an attending physician on infectious disease wards at the Centro Medical Naval and Cayetano Heredia Medical Center, Lima, Peru.

INTERNATIONAL HEALTH AND TROPICAL MEDICINE

I have had a long standing interest in international health and tropical medicine:

- Successfully completed a course (in spanish) in tropical medicine at the Cayetano Heredia Hospital in Lima, Peru. Course included didactic lectures, laboratory experience, and patient evaluations in Lima plus a 2 week field experience in Iquitos. I followed this experience with a 3 week sero-epidemiology study in villages along the Amazon River near Iquitos sponsored by the US Navy lab (NAMRID) in Lima.
Jan-April 1984
- Participated in a large, hepatitis A vaccine field efficacy trial in Thailand sponsored by the US Army. I was part of a vaccine team that daily vaccinated hundreds of children. I was able to see first hand the tremendous logistical, administrative, and cultural problems associated with doing field trials of vaccines in developing countries.
Jan-Feb 1991
- Deployed to Somalia during Operation Restore Hope to perform an acute febrile illness study in US forces. Enrolled and characterized febrile illness and performed infectious disease related diagnostic tests to determine specific etiologies.
Feb-May 1993
- Traveled to northern Mato Grosso state, Brazil, to assess the potential of a field site identified by USAMRU-Brazil personnel for clinical intervention trials (malaria vaccine, malaria drug treatment trials, assessment of diagnostics and treatment for cutaneous leishmaniasis, etiology of jaundice, and hepatitis).
- Member of the Indo-U.S. Vaccine Action Program (VAP) Malaria Mission organized by NIAID to identify research opportunities and develop collaborative protocols between members of the U.S. and Indian malaria community. I participated in the first phase which took place in New Delhi, India.
- Traveled to the eastern terai (lowland area in the Gangetic plain) of Nepal as an AID consultant to assess the potential of field testing the rK39 dipstick test for the rapid diagnosis of kala-azar. Evaluated patients in an endemic setting, demonstrated the dipstick, and worked with local physicians to set up collaborative studies.
March 1996
- Several short term trips (1-2 weeks) to visit the US Army field sites in western Kenya to assist in various product development clinical trials of malaria vaccines and anti-malarial drugs.
1992-1996

• Permanently assigned to the US NMRC laboratory in Lima, Peru, working primarily in the area of malaria and leishmaniasis. Activities in malaria were directed toward developing field sites in Peru for interventional clinical trials for the phase I and II testing of malaria vaccines, anti-malarial drugs, and rapid, non-microscopic methods of diagnosis. This included writing and conducting human use protocols under cGCP, working closely with host country officials of the Ministry of Health, and recruiting and training of host country personnel in the conduct of clinical trials under cGCP. Activities in leishmaniasis were directed to the clinical evaluation of new diagnostic products to include a skin test and improved serodiagnostic tests using defined antigens and topical anti-leishmanial compounds for the treatment of cutaneous leishmaniasis. These products were tested in phase I and II clinical trials conducted under cGCP. Other activities in the tropical infectious diseases as they present in Peru to include outbreak investigations, interesting cases, and assisting in other investigators projects as the opportunities arise. Sep 1996-Dec 1999

RESEARCH INTERESTS

• Primary research interests are in travel and tropical medicine. In particular, the protozoan parasites causing malaria and leishmaniasis.

Malaria:

1. Principal investigator in clinical efficacy trials of malaria rapid diagnostic devices (MRDDs) utilizing parasite specific antigens (HRP-2, pLDH, and proprietary Ags) and novel detection methods. This work involves collaborations with Flow, Inc., a small biotechnology company in Portland, Oregon; Becton Dickinson Microbiology Systems, Sparks, MD, USA, and AMRAD-ICT, Sydney, Australia under CRDAs. Two approved human use protocols (WRAIR No. 655 and WRAIR No. 687) are ongoing in Peru and Thailand. We are performing prototype development trials, clinical validation / comparative trials, and FDA quality licensure trials of the MRDD in-vitro diagnostic product via the PMA/PDP process with CDRH of the U.S. FDA. This work involves the coordination of many different groups with different agendas to include the participating companies, the US Army, US FDA and the host nation health officials.
2. Participant in the RTS,S vaccine development program of the US Army and Smith-Kline-Beecham Biologicals (SKBBIO).
3. Principal investigator for WRAIR No. 719: "Resistance to CQ and PS in PF malaria in the Upper Amazon Basin". Resistance of *P. falciparum* to standard anti-malaria drugs are being studied through *in vitro* metabolic assays in Peru and *in vivo* clinical trials. This work also involved collaboration between US NAMRID, WRAIR, the University of Maryland (Dr. Chris Plowe) and the CDC.
4. Participated in the Peruvian National Anti-Malaria Drug Conference as a contributor and an expert advisor in August 1999. Peru is facing a crisis in the Amazonian region where chloroquine and pyrimethamine-sulfadoxine are no longer efficacious. My role included discussions on all aspects of the debate to include drug and drug combination efficacy, methods of detection and monitoring drug resistance, how to implement a change in national policy, and how to educate and train Ministry of Health personnel in the use of new regimens.

Leishmaniasis:

• Project officer in charge of developing a *Leishmania* skin test antigen (LSTA). Unexpected clinical presentations of *L. tropica* in veterans of Operation Desert Storm (ODS) and the possible relationship of undetected *Leishmania* infections to unexplained Gulf War related illness has led to a need to know what the rate of infection was in ODS veterans. A potent, non-sensitizing, stable LSTA which elicits delayed type hypersensitivity (DTH) in a previously infected host would be a valuable epidemiological tool. Various preparations were tested in a guinea pig model and one proceeded to cGMP manufacture, IND application and clinical trials. A lot of LSTA intended for human use, a 1st generation LSTA called MFL-LSTA, has been manufactured under cGMP. IND application to the US FDA is complete and

an IND (BB-6694) was awarded in November 1996. WRAIR human use protocol #576, a phase 1 protocol for the MFL-LSTA, was completed on 11 Feb 1997. Unexpected safety problems (hypersensitivity reactions in two volunteers) led to a change in manufacturing. A reformulated product has been manufactured and new clinical trials will begin in fall, 2000.

Product Development

•I have written and submitted an Investigational New Drug (IND) Application (BB-IND-6694) to the United States Food and Drug Administration (FDA). I was the primary point of contact with the FDA and was responsible for all aspects of this project from concept to final product.

•I have written and served as technical point of contact for Cooperative Research and Development Agreements (CRADAs) with private industrial partners.

Project Title: Lel as a Vaccine Adjuvant. CRDA No. 9606-M-C835. Corixa Corporation, Seattle, WA.

Project Title: rK39 as a diagnostic antigen for the diagnosis of Kala-azar. CRDA No. DAMD17-96-0052, Corixa Corp, Seattle WA.

Project Title: Development of rapid diagnostic tests for tropical infectious diseases. CRDA No. (Pending final approval). AMRAD-ICT Diagnostics, Sydney, Australia.

Project Title: Development of rapid diagnostic tests for tropical infectious diseases. CRDA No. (Pending final approval). Becton-Dickinson Microbiological Systems, Sparks, MD.

Project Title: Diagnostic antigens for Kala-azar. CRDA No. DAMD17-96-0105. Majesco Biologicals, Inc. Annandale, NJ.

Project Title: Use of QS-21 as an adjuvant to boost the immune response to recombinant malaria antigens. AquilaBiopharmaceuticals, Inc. NIAID Final No. pending

Project Title: Use of MF-59 as an adjuvant to boost the immune response to recombinant malaria antigens. Chiron, Inc. NIAID Final No. pending

Project Title: Use of CpGs as an adjuvant to boost the immune response to recombinant malaria antigens. Coley Pharmaceutical Group, Inc. NIAID Final No. pending

Project Title: Genetic response to vaccinia immunization using micro-arrays. Acambis, Inc. (CRDA Number, "DAMD17-02-0051", Agreement for Material Transfer (CRADA-MT) between WRAIR (LTC Alan Magill) and Acambis, Inc.

•Certified in cGCP and familiar with concepts of human use, especially as they apply to the developing world.

•Experienced in the conduct of clinical trials in developing countries with limited infrastructure, difficult logistics, and significant linguistic and cultural barriers to performing trials to western regulatory standards.

•Invention disclosure filed (16 Dec 98) Log No. WRAIR 98-46: Magill, Alan J.; Stiteler, John M.; Grogl, Max; Rowton, Edgar D.; Eckels, Kenneth H.; Ballou, W. Ripley (Division of CD&I, WRAIR) "Microfluidized Leishmania Skin Test Antigen"

•Assignment of Invention for U.S. Application Serial Number 09/975,020 and PCT/US01/31/020 filed 12 Oct, 2001

CURRENT ACTIVITIES

• Beginning in October 2001, I accepted the new assignment and position of Deputy Director, Communicable diseases & Immunology of the Walter Reed Army Institute of Research. Selected activities:

- 1) Malaria Rapid Diagnostic Device (MRDD) - Appointed to the DoD MRDD Transition and Tracking Group (TPTG), 5 Jun 00. The TPTG is tasked with packaging and basis of issue across the services, National Stock Number and nomenclature, fielding and procurement, and preparing for the Milestone II in-process review scheduled for 4QFY01
- 2) Senior clinical investigator in the Department of Clinical Trials
- 3) Diagnostics research coordinator for MIDRP-MRMC

CLINICAL PROTOCOL INVOLVEMENT (this section is incomplete, building):

WRAIR Scientific Review committee:

1. WRAIR Protocol No. xxx. Enhancing the Well-Being and Readiness of Soldiers and Families Defending the Homeland (Oct, 01)
2. A Phase 1 trial of vCP1630, an Aventis-Pasteur (AP) Live recombinant ALVAC-HIV (HIV-1 subtype A env and subtype A gag/pol 92UG037) in Uganda (Jan, 02)
3. A phase 1 trial of vCP1630, an Aventis-Pasteur (AP) live recombinant ALVAC-HIV (HIV-1 subtype A env and subtype A gag/pol 92UG037) or ALVAC-HIV (HIV-1 subtype E vCP1521) prime with gp120 AIDSVAX B/E® boost in American seronegative adults (Jan 02)

DMID Malaria Program Protocol review Committee:

Inactive:

1. WRAIR protocol No. 655, BDMS TRIAL NO: 97FT-028-NAMRID-PFV . Preliminary Field Evaluation of ParaSight™ F+V in Peru. Principal investigator and primary author of protocol

Active:

1. WRAIR protocol No. 687. Diagnostic Accuracy and Performance Characteristics of Malaria Rapid Diagnostic Assays. Co-Principal Investigator, significant involvement in protocol development and trial execution and supervision.
2. WRAIR protocol No. 818. Performance Characteristics of Prototype Malaria Rapid Diagnostic Assays. Associate investigator, significant involvement in protocol development and writing protocol.
3. WRAIR Protocol No. 907. Randomized, double-blind, phase 3, pivotal, field trial of the comparative immunogenicity, safety, and tolerability, of two yellow fever 17D vaccines (ARILVAX™ and YF-Vax™) in healthy infants and children in Peru.
Protocol development, IRB approvals, trial procedures, manuscript writing
4. WRAIR Protocol No. 904, Malaria FMP-1 in Kenya
Protocol development, field site investigator

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2. Endy TP, Larson KK, **Magill AJ**, King AD, Aronson NE, Oster CN. T Helper response in a patient with visceral leishmaniasis treated with sodium stibogluconate (Pentostam) therapy. (Manuscript written, being evaluated by authors, planned submission to AJTM&H)

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45. **Magill AJ**, Wongsrichanalai C, Forney JR, Sirichasinthop J, Gasser, Jr. RA. Performance Characteristics of the AMRAD-ICT P.f./P.v. Malaria Rapid Diagnostic Device (MRDD). 6th Conference of the International Society of Travel Medicine. Montreal, Canada. June 1999.
46. Roper MH, Chang OJ, Chan AST, Carrion RS, **Magill AJ**, Hightower AW. Spatial Patterns of Malaria in Padre Cocha, Peru. American Public Health Association 1999 annual meeting. Session No. 2202: Applications of GIS in International Health. Chicago, IL. November 1999.
47. Garcia C, Carrión R, Rimarchin D, Vásquez M, Carey C, Calampa C, Llanos-Cuentas A, **Magill AJ**. Malaria asintomatica en el caserio de Padre Cocha, Loreto, Perú. VI Congreso Peruano de Enfermedades Infecciosas y Tropicales. Lima, Peru. August 1999.
48. Andersen EM, Solari L, Carrion R, Calampa C, Aramburu JS, Roper MH, **Magill AJ**, Baird JK. Plasmodium vivax chloroquine resistance in the Peruvian Amazon. 48th annual meeting of the American Society of Tropical Medicine and Hygiene. Washington DC, USA. December 1999.
49. Forney JR, **Magill AJ**, Wongsrichanalai C, Sirichasinthop J, Heppner DG, Miller RS, Ockenhouse CF, DeWitt CC, Kester KE, Ballou WR, Walsh DS, Kain KC, Quino-Ascurra HA, Gasser RA Jr. Performance characteristics of the Parasight™ F malaria rapid diagnostic device (MRDD). 48th annual meeting of the American Society of Tropical Medicine and Hygiene. Washington DC, USA. December 1999.
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51. Baird JK, Rathore D, McCutchan TF, Fryauff DJ, **Magill AJ**, Andersen E, Rogers WO, Hoffman SL. Diagnosis of sensitivity to chloroquine in *Plasmodium vivax* by PCR assay of the ortholog of *P. falciparum* CG4. 48th annual meeting of the American Society of Tropical Medicine and Hygiene. Washington DC, USA. December 1999.
52. **Magill AJ**, Garcia C, Solari L, Yliquimiche L, Vasquez M, Carey C, Calampa C, Llanos-Cuentas A. Therapeutic efficacy of pyrimethamine / sulfadoxine in the Peruvian Amazon. 48th annual meeting of the American Society of Tropical Medicine and Hygiene. Washington DC, USA. December 1999.
53. Stitler JM, Rowton ED, Grogl M, Eckels KH, Martin SK, Miller R, **Magill AJ**. Current good manufacturing practices (cGMP) production of a heat-treated *Leishmania* skin test, MFL-LSTA[R2]. 48th annual meeting of the American Society of Tropical Medicine and Hygiene. Washington DC, USA. December 1999.
54. Roper MH, Carrion torres RS, Chan A, Chang OJ, Andersen EM, Cava Goicochea CG, Aramburu Guarda JS, Calampa C, Hightower AH, **Magill AJ**. The epidemiology and spatial distribution of malaria in Padre Cocha, Peru. 48th annual meeting of the American Society of Tropical Medicine and Hygiene. Washington DC, USA. December 1999.

55. Wongrichanalai C, Forney JR, **Magill AJ**, Sirichasinthop J, Heppner DG, Miller RS, Ockenhouse CF, DeWitt CC, Kester KE, Ballou WR, Walsh DS, Quino-Ascurra HA, Kain KC, Gasser RA Jr. Performance characteristics of a prototype malaria rapid diagnostic device (MRDD) for the detection of *Plasmodium falciparum* and *Plasmodium vivax*. 48th annual meeting of the American Society of Tropical Medicine and Hygiene. Washington DC, USA. December 1999.
56. Gozalo AS, Lucas CM, Welde BT, Hall BT, **Magill AJ**, Watts, DM, Sharp TW, Ballou WR. The role of native antibodies to the 19kD MSP-1 fragment in immunity against *Plasmodium falciparum* in Aotus monkeys. 48th annual meeting of the American Society of Tropical Medicine and Hygiene. Washington DC, USA. December 1999.
57. Chan AST, Ryan JR, Zyzak MD, Calampa C, **Magill AJ**. Seasonal abundance, distribution, and biting patterns of the Anopheline (Diptera: Culicidae) populations of iquitos, Peru, and their relation to the incidence of malaria. 48th annual meeting of the American Society of Tropical Medicine and Hygiene. Washington DC, USA. December 1999.
58. Gasser R Jr., Forney R, **Magill AJ**, Wongrichanalai, C. Malaria rapid diagnostic devices: sensitivity and specificity of two versions of a *P. falciparum* histidine rich protein -2 antigen capture assay for diagnosis of malaria (Abstract No. 95). Society of Air Force Physicians (Air Force Region, American College of Physicians), San Antonio, Tx. March 2000.
59. Gasser Jr., RA, Forney JR, **Magill AJ**, Sirichasinthop J, Bautista C, Wongsrichanalai C. Continuing Progress in Rapid Diagnostic Technology for Malaria: Field Trial Performance of a Revised Immunochromatographic Assay (OptiMAL®) Detecting Plasmodium-Specific Isoforms of Lactate Dehydrogenase. XV International Congress of "Tropical Medicine and Malaria: Needs and Resources for Better Health in the Tropics". Cartagena, Colombia. August 20-25, 2000.
60. **Magill AJ**, Wongsrichanalai C, Forney JR, Bautista C, Sirichasinthop J, Andersen EM, Vidal C, Aronson NE, Moran KA, Murray CK, Calampa C, Gasser Jr RA. Performance characteristics of a prototype malaria rapid diagnostic device (MRDD) for the detection of *Plasmodium falciparum* and *Plasmodium vivax*. Poster No. 472. 38th annual meeting of the Infectious Diseases Society of America. New Orleans, La, USA. September, 2000.
61. Wootton JC, Ferdig MT, Cooper RA, **Magill AJ**, Su X-z. High-resolution genome typing of *Plasmodium falciparum* isolates: mapping geographical origins and genetic determinants through shared chromosomal segments. 49th annual meeting of the American Society of Tropical Medicine and Hygiene. Houston, Texas, USA. 29 October- 2 November 2000.
62. Jones TR, Narum DL, Gozalo AS, Aguiar J, Fuhrman SR, Liang H, Haynes JD, Moch JK, Lucas C, Luu T, **Magill AJ**, Hoffman SL, Sim BKL. Protection of Aotus monkeys by *Plasmodium falciparum* EBA-175 region II DNA prime-boost immunization regimen. 49th annual meeting of the American Society of Tropical Medicine and Hygiene. Houston, Texas, USA. 29 October- 2 November 2000.
63. Forney JR, Wongsrichanalai W, **Magill AJ**, Sirichasinthop J, Gasser RA Jr. Performance characteristics of the I.C.T. Malaria P.f./P.v.™ rapid diagnostic device for the detection of *Plasmodium falciparum* and *Plasmodium vivax*. 49th annual meeting of the American Society of Tropical Medicine and Hygiene. Houston, Texas, USA. 29 October- 2 November 2000.
64. Roncal N, Gerena L, Colina O, Lucas C, Bautista C, Garcia C, Solari L, Andersen EM, Kyle DE, Lanos-Cuentas A, and **Magill AJ**. *In vitro* sensitivity of *Plasmodium falciparum* to anti-malarials in the Peruvian Amazon. 49th annual meeting of the American Society of Tropical Medicine and Hygiene. Houston, Texas, USA. 29 October- 2 November 2000.

65. Su X-z, Ferdig MT, Cooper RA, **Magill AJ**, Wootton JC. Genome wide typing of *Plasmodium falciparum* isolates: shared alleles associated with drug responses and other phenotypes. 49th annual meeting of the American Society of Tropical Medicine and Hygiene. Houston, Texas, USA. 29 October- 2 November 2000.
66. Gasser RA Jr, Forney JR, **Magill AJ**, Wongsrichanalai C. Malaria rapid diagnostic devices: sensitivity & specificity of two versions of a parasite lactate dehydrogenase antigen capture assay for diagnosis of malaria. Society of Air Force Physicians (Air Force Region, American College of Physicians), Biloxi MS. 5-8 March 2001.
67. Wootton J, Feng X, Ferdig M, Cooper R, Mu J, **Magill AJ**, Su X. Global genome-wide haplotypes, linkage dis-equilibrium, and drug selective sweeps in the human malaria parasite *Plasmodium falciparum*. No. 31. 50th annual meeting of the American Society of Tropical Medicine and Hygiene. Atlanta, Georgia, USA. 11-15 November 2001.
68. Gasser RA Jr., Arevalo I, Miller RS, **Magill AJ**, Forney JR, Wongsrichanalai C. Preliminary evaluation of the NOW@ICT Malaria P.F./P.V. rapid diagnostic device for the detection of *Plasmodium falciparum* and *Plasmodium vivax*. No. 516. 50th annual meeting of the American Society of Tropical Medicine and Hygiene. Atlanta, Georgia, USA. 11-15 November 2001.

CONTINUING MEDICAL EDUCATION (Category 1 CME):

<i>• 1993 Course Title and Dates:</i>	<i>Sponsor and Location:</i>	<i>Hours Credit:</i>
Infectious Disease Conferences Walter Reed Army Medical Center Washington, D.C. 01 Jul - 30 Jun 1993	OTSG, U.S. Army Washington, DC	30
Tropical Medicine Update 30-31 Oct, 1993	ASTM&H Atlanta, GA	9.5
42 nd Annual Meeting of the American Society of Tropical Medicine and Hygiene 31 Oct-4 Nov 1993	ASTM&H Atlanta, GA	23.5
1993 Category 1 CME Total		63
<i>• 1994 Course Title and Dates:</i>	<i>Sponsor and Location:</i>	<i>Hours Credit:</i>
Infectious Disease Conferences Walter Reed Army Medical Center Washington, D.C. 01 Jul - 30 Jun 1994	OTSG, U.S. Army Washington, DC	53
43rd Annual Meeting of the American Society of Tropical Medicine and Hygiene 13-17 Nov 1994	ASTM&H Cincinnati, OH	22
1994 Category 1 CME Total		75
<i>• 1995 Course Title and Dates:</i>	<i>Sponsor and Location:</i>	<i>Hours Credit:</i>
Infectious Disease Conferences Walter Reed Army Medical Center 01 Jul - 30 Jun 1995	OTSG, U.S. Army Washington, D.C.	20
Medicine for Adventure Travel 16-21 Jul, 1995	St. John's Hospital Jackson, WY	24
Molecular and Cellular Mechanisms of Immunity (IMMU 521M) Fall Semester 1995	Foundation for Advanced Education in the Sciences, Inc. and the NIH Washington D.C.	32
44 th Annual Meeting of the American Society of Tropical Medicine and Hygiene 17-21 Nov 1995	ASTM&H San Antonio, TX	13.75
1995 Category 1 CME Total		89.75
<i>• 1996 Course Title and Dates:</i>	<i>Sponsor and Location:</i>	<i>Hours Credit:</i>
Infectious Disease Conferences Walter Reed Army Medical Center	OTSG, U.S. Army Washington, D.C.	33

01 Jul - 30 Jun 1996

45 th Annual Meeting of the American Society of Tropical Medicine and Hygiene 1-5 Dec 1996	ASTM&H Baltimore, MD	28.5
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1996 Category 1 CME Total 61.5

<i>• 1997 Course Title and Dates:</i>	<i>Sponsor and Location:</i>	<i>Hours Credit:</i>
Infectious Disease Conferences Walter Reed Army Medical Center 01 Jul - 30 Jun 1997	OTSG, U.S. Army Washington, D.C.	2
Medicine for Adventure Travel 7-11 Jul 1997	St. John's Hospital Jackson, WY	22.5
46 th Annual Meeting of the American Society of Tropical Medicine and Hygiene 7-11 Dec 1997	ASTM&H Orlando, FL	30

1997 Category 1 CME Total 54.5

<i>• 1998 Course Title and Dates:</i>	<i>Sponsor and Location:</i>	<i>Hours Credit:</i>
2 nd Annual Amazon Travel Medicine Course 9-17 Jan 1998	UAB, School of Medicine Lima, Peru and Iquitos, Peru	20
Medical Management of Chemical and Biological Casualties Course (6H-F26) 12-18 Sep 1998	OTSG, U.S. Army Aberdeen Proving Ground, MD and Ft. Detrick, MD	46

1998 Category 1 CME Total 66

<i>• 1999 Course Title and Dates:</i>	<i>Sponsor and Location:</i>	<i>Hours Credit:</i>
Medicine for Adventure Travel 12-16 Jul 1999	St. John's Hospital Jackson, WY	22
ASTM&H Intensive Review Course in Clinical Tropical Medicine and Traveler's Health	ASTM&H San Francisco, CA	14.5
48 th Annual Meeting of the American Society of Tropical Medicine and Hygiene 28 Nov - 2 Dec 1999	ASTM&H Washington, D.C.	30

1999 Category 1 CME Total 66.5

<i>• 2000 Course Title and Dates:</i>	<i>Sponsor and Location:</i>	<i>Hours Credit:</i>
International Symposium on Combination Vaccines 2-4 Feb 2000	Centers for Disease and Control and Prevention Bethesda, MD	19

3 rd Annual Conference on Vaccine Research 30 April – 2 May 2000	National Foundation for Infectious Diseases Washington, DC	9
38th Annual Meeting of the Infectious Diseases Society of America 7-10 Sep 2000	Johns Hopkins University School of Medicine Baltimore, MD	21
2000 Pre-Meeting Course: Updates in Arthropod Borne Human Diseases of the New World 28-29 Oct, 2000	ASTM&H Houston, TX	8.75
49 th Annual Meeting of the American Society of Tropical Medicine and Hygiene 29 Oct - 2 Nov 2000	ASTM&H Houston, TX	26.75
ACLS Recertification Course 19-20 Dec 2000	NIH/FAES CME Committee Bethesda, MD	14
<hr/> 2000 Category 1 CME Total		98.5

<i>• 2001 Course Title and Dates:</i>	<i>Sponsor and Location:</i>	<i>Hours Credit:</i>
Mountain and Travel Medicine Conference 26 - 30 March, 2001	University of Toronto Toronto, Ontario, Canada Lhasa, Tibet, China	10.5
7th Conference of the International Society of Travel Medicine 27-31 May, 2001	Emory University Atlanta, GA Innsbruck, Austria	18.0
IRB 101 1 June, 2001	Uniformed Services University of the Health Sciences Bethesda, MD	6.0
Medicine for Adventure Travel 20 July - 24 July, 2001	St. John's Hospital and Living Center Jackson, WY, USA	25.0
Vaccinia (Smallpox) Vaccine: Recommendations of the Advisory Committee on Immunization Practices (ACIP), 2001 17 Oct 2001	Centers for Disease Control Atlanta, GA, USA	1.25
WRAMC 2001 Research Course 25 October, 2001	Walter Reed Army Medical Center Department of Clinical Investigation Bethesda, MD, USA	
Updates in Special Bacterial Pathogens 10-11 November, 2001	American Society of Tropical Medicine and Hygiene pre-meeting course Atlanta, GA, USA	9.75
50 th Annual Meeting of the American Society of Tropical Medicine and Hygiene 11 Nov - 15 Nov 2001	ASTM&H Atlanta, GA, USA	29.75
2001 Category 1 CME Total)		100.25

<i>• 2002 Course Title and Dates (to date):</i>	<i>Sponsor and Location:</i>	<i>Hours Credit:</i>
IRB Ethics Symposium: Special Issues In the ethics of Human Subjects Protections 30 Jan 2002	Naval Medical Research Center & USUHS Bethesda, MD, USA	6.0